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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,502	11/15/2003	Clair John Glossner III	YOR919990548US4 (8728-341)	9966
46069 7590 07/09/2007 F. CHAU & ASSOCIATES, LLC 130 WOODBURY ROAD WOODBURY, NY 11797			EXAMINER PAN, DANIEL H	
			ART UNIT 2183	PAPER NUMBER
			MAIL DATE 07/09/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/713,502	<b>Applicant(s)</b> GLOSSNER ET AL.	
	<b>Examiner</b> Daniel Pan	<b>Art Unit</b> 2183	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 February 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3,5-11,14,16-22,25 and 27-33 is/are pending in the application.
- 4a) Of the above claim(s) 1,2,4,12,13,15,23,24,26 and 34-60 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-11,14,16-22,25 and 27-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>03/03/04</u> . | 6) <input type="checkbox"/> Other: _____  |

1. Claims 1,3,5,6-11,14,16-22,25,27-33 are presented for examination. Claims 1,2, 4, 12,13, 15, 23,24,26, 34-60 have been canceled. This is in response to the pre-brief conference request on 02/21/07 and the decision to reopen on 05/01/07. T.D. on 04/25/05 has been received.
2. Therefore, this is a non-final action. The final action on 11/21/06 has been withdrawn.

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 31,32 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The reasons are given below.
4. As to claim 31, 32, no clear final result which is made available for use in the disclosed practical application nor being applied in the disclosed practical application can be found. The claim is reciting providing the vector data file and providing the pointer array and the storage elements of the vector data file are logically organized in matrix rows and columns and each entry storing the address representing the row and column. The application of storage of the address is not clear. The practical application of the logically organized matrix is unclear.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3, 8, 9 –11,14,19-22,25, 31,32 ,33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fossum et al. (4,888,679) in view of Birrittella (6,266,759).

6. As to claims 3, 8,14,19, 22, 25,31,33, Fossum taught a vector data file comprising a plurality of storage elements for storing data elements of the data vectors (see vector elements in fig.3); a pointer array electrically coupled by a bus to the vector data file, the pointer array ( $A_i$ ) including a plurality of entries  $[N-1]$ , each entry identifies at least one storage element in the vector data file (see vector element address  $A_i$  for each vector element, col.7, lines 9-32);

7. The storage element (see memory bank in fig.3) for storing at least one data element of the data vectors ( $A$ ), the one storage element identified by the particular entry had an address (see the byte address and the stride) in the vector data file; and the pointer array  $[A_i]$  included one entry which was updated based on one of data read out from at least one data element in the vector data file and data generated by performing an increment operation on data read from at least one entry of the pointer array (see the index range from 0- $N-1$  in col.7, lines 9-32, see the adder adding current address of the entry to the stride in col.7, lines 34-54), the pointer array includes at least two entries (see the variable length stride  $S$  in col.7, lines 9-54) which are updated as part of a same logical operation (see the logic comparator in col.7, lines 55-56).

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8. As to claims 9, 10, 11, 20, 21, 31, 32 see Fossum's row and column matrix of vector in col.7, lines 14-23.

9. As to the storage device readable by machine, tangibly embodying a program of instructions executable by machine claim 25, Fossum also taught storage device readable by machine, tangibly embodying a program of instructions executable by machine (see col.1, lines 16-27).

10. Fossum did not specifically show the arbitrary starting address as claimed. However, Birrittella taught an arbitrary starting address (col.3, lines 4-18). It would have been obvious to one of ordinary skill in the art to use Birrittella in Fossum for including an arbitrary address as claimed because the use of Birrittella could provide Fossum the ability to access the vector data at randomly located vector element in the storage, therefore increasing the flexibility of read and write operations at an arbitrary address, and it could be done by reconfiguring the arbitrary address of Birrittella in to Fossum with modified data control parameters (e.g. the vector address byte length), so that arbitrary address of Birrittella could be recognized by Fossum, and because Birrittella did teach his arbitrary address was an alternative to a stride address, and since Fossum already taught a stride address, which was a suggestion of the applicability of arbitrary address in Fossum.

11. Claims 7,16-18, 29,30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fossum et al. (4,888,679) in view of Birrittella (6,266,759) as applied to claims 3,14, 25 above, and further in view of Sakakibara (5,392,443) .

12. As to claim 7, 16-18,29,30, Neither Fossum nor Birrittella specifically show the modulo operations as claimed. However, Sakakibara taught a modulo operation for a

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vector operation (see col.18, lines 9-19). It would have been obvious to one of ordinary skill in the art to use Sakakibara in Fossum for including the modulo as claimed because the use of Sakakibara could provide Fossum the control capability to accept different operation format, such as modulo N, to generate the address result, and it could be done by predefining the modulo operation into Fossum with modified configuration variables (e.g. operation format etc.) so that specific operation of the modulo in Sakakibara could be recognized by Fossum, and because Fossum did teach his pointer array included stride address (see the variable length stride S in col.7, lines 9-54), which was an suggestion of the need for including a specific pattern of address value, such as modulo N in order to increase the address capability for accepting different operation format, in doing so, provided a motivation.

13. Claims 5,6,27,28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fossum et al. (4,888,679) in view of Birrittella (6,266,759) and in view of Sakakibara (5,392,443).

14. As to claims 5,6, 27, 28, Fossum did not specifically show the arbitrary starting address as claimed. However, Birrittella taught an arbitrary starting address (col.3, lines 4-18). It would have been obvious to one of ordinary skill in the art to use Birrittella in Fossum for including an arbitrary address as claimed because the use of Birrittella could provide Fossum the ability to access the vector data at randomly located vector element in the storage, therefore increasing the flexibility of read and write operations at an arbitrary address, and it could be done by reconfiguring the arbitrary address of Birrittella in to Fossum with modified data control parameters (e.g. the vector address byte length), so that arbitrary address of Birrittella could be recognized by Fossum, and because Birrittella did teach his arbitrary address was an alternative to a stride address, and since Fossum already taught a stride address, which was a suggestion of the applicability of arbitrary address in Fossum.

15. Neither Fossum nor Birrittella specifically show the modulo operations as claimed. However, Sakakibara taught a modulo operation for a vector operation (see col.18, lines 9-19). It would have been obvious to one of ordinary skill in the art to use Sakakibara in Fossum for including the modulo as claimed because the use of Sakakibara could provide Fossum the control capability to accept different operation format, such as modulo N, to generate the address result, and it could be done by predefining the modulo operation into Fossum with modified configuration variables (e.g. operation format etc.) so that specific operation of the modulo in Sakakibara could be recognized by Fossum, and because Fossum did teach his pointer array included stride address (see the variable length stride S in col.7, lines 9-54), which was an suggestion of the need for including a specific pattern of address value, such as modulo N in order to increase the address capability for accepting different operation format, in doing so, provided a motivation.

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) Karp is cited for disclosing arbitrary starting address (see col.4, lines 61-66, col.5, lines 13-32).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Pan whose telephone number is 571 272 4172.

The examiner can normally be reached on M-F from 8:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chan, can be reached on 571 272 4162. The fax phone number for the organization where this application or proceeding is assigned is 703 306 5404.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

***21 Century Strategic Plan***

DANIEL H. PAN  
PRIMARY EXAMINER  
GROUP